

Work Order ID 57312 -1

Monday, April 05, 2010 11:59:31 AM



Page 1

Item ID: D3908-041

Revision ID:

Item Name: Crosstube Lug Assembly, Aft

Start Date: 4/5/2010 Start Qty: 6.00

Required Date: 4/6/2010 Req'd Qty: 6.00

Reference:

Approvals: Process Plan: MF

QC:

Date: 4-5

Date:

Accept

Tooling:

SPC (Y/N):

Cust Item ID:

Customer:

Setup Start

Stop

Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Draw Nbr

Revision Nbr

D3908

Rev B

100

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

110



Small Fab

Memo

0.00

Small Fab

1- Assemble as per dwg
TRIM RIVETS 1.185" LONG

120



QC

Memo

0.00

Quality Control

QC5- Inspect part completeness to step on W/O

to Rev B approved Day

MF 10-4-76 to →

3 →
SAD 10-04-05 10/04/8 (3)

Sidouling

23

Dart Aerospace Ltd

W/O: 57312		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10/6/19	#	change header Box to Rev B	<i>[Signature]</i>	10.04.20			S 10/6/19

Part No: D3908-041 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 57312

Monday, April 05, 2010 11:59:31 AM



Page 2

Item ID: D3908-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Crosstube Lug Assembly, Aft

Start Date: 4/5/2010 Start Qty: 6.00



Required Date: 4/6/2010 Req'd Qty: 6.00



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



Packaging

Packaging

Identify as per dwg & Stock Location: Sub

0.00

Memo

0.00

140



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/4/20 (3)

10/04/20

MF 10-4-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 1

Monday, April 05, 2010 11:59:31 AM

Work Order ID: 57312

Parent Item: D3908-041

Parent Item Name: Crosstube Lug Assembly, Aft

Comments: IPP RevA: New issue DD verified by:EC

Start Date: 4/5/2010

Required Date: 4/6/2010

Start Qty: 6.00

Required Qty: 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3908-1		Manufactured	No			100	Each	16.0000	12.0000			
---------	--	--------------	----	--	--	-----	------	---------	---------	--	--	--

Lug Plate, Aft Crosstube

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST095	16	
	57117	16	

D3908-3		Manufactured	No			100	Each	8.0000	6.0000			
---------	--	--------------	----	--	--	-----	------	--------	--------	--	--	--

Stud Receiver, Lower

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST095	8	
	56957	8	

D3909-5		Manufactured	No			100	Each	8.0000	6.0000			
---------	--	--------------	----	--	--	-----	------	--------	--------	--	--	--

Eyebolt Stud

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST095	8	
	56953	2	
	57283	6	

D3910-1		Manufactured	No			100	Each	0.0000	12.0000			
---------	--	--------------	----	--	--	-----	------	--------	---------	--	--	--

Crosstube Lug

MF 10-4-5

MF 10-4-5

MF 10-4-5

8 x 57107

4 x 57194

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 2

Monday, April 05, 2010 11:59:31 AM

Work Order ID: 57312



Parent Item: D3908-041



Parent Item Name: Crosstube Lug Assembly, Aft

Start Date: 4/5/2010

Required Date: 4/6/2010

Comments: IPP RevA: New issue DD verified by:EC

Start Qty: 6.00

Required Qty: 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN3C12A

Purchased

No

100

Each

248.0000

24.0000



Bolts

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST351

248

112314

248

100

Each

3,978.000

24.0000

MS21043-3

Purchased

No



Nut

Warehouse
Location

Loc Qty

Loc Code

OFFSHORE

FG

80

103691

80

Main Warehouse

ST301

3898

112314 *

3898

100

Each

34.0000

36.0000

MS20615-4M20

Purchased

No



RIVET

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST323

34

112324

34

Monday, April 05, 2010 11:59:31 AM

Shop Packet Print

Page 2

MF 10-4-5

MF 10-4-5

9/5/04/18

1114324

(18x)

1114304

(18x)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 3

Monday, April 05, 2010 11:59:31 AM

Work Order ID: 57312

Parent Item: D3908-041

Parent Item Name: Crosstube Lug Assembly, Aft

Comments: IPP RevA: New issue DD verified by:EC

Start Date: 4/5/2010

Required Date: 4/6/2010

Start Qty: 6.00

Required Qty: 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
NAS1149C0332R		Purchased	No			100	Each	629.0000	48.0000			



Washer



<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST297	629	
113524	500	
113691	-57	
113737	186	

WCE 10-45

Monday, April 05, 2010 11:59:31 AM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

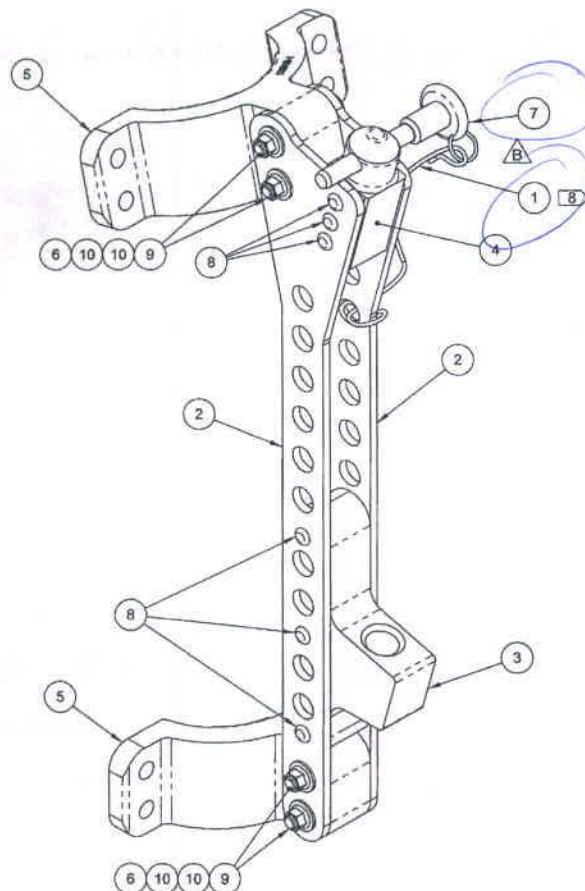
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM	QTY.	P/N	DESCRIPTION
X		D3908-041	X-TUBE LUG ASSY (AFT)
1	1	D2690-6	LANYARD <i>850667</i>
2	2	D3908-1	AFT X-TUBE LUG PLATE
3	1	D3908-3	STUD RECEIVER LOWER
4	1	D3908-5	EYEBOLT STUD
5	2	D3910-1	X-TUBE LUG
6	4	AN3C12A	BOLT
7	1	MS17984-C413	PIP PIN <i>M117340</i>
8	6	MS20615-4M20	RIVET
9	4	MS21043-3	NUT
10	8	NAS1149C0332R	WASHER



D3908-041 X-TUBE LUG ASSY (AFT)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3908-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 2.35 lbs
- 8) ATTACH TO D3908-1 BY LOOPING AROUND LIGHTENING HOLE FIRST AND THEN SECURE TO MS17984-C413 PIP PIN'S RING.

RELEASED
2010-04-14
MP

57312

B	BOM: D3908-5 REPLACED WITH D3908-5. QTY 1 ADDED: D2690-6 & MS17984-C413. SHEET 5: ADDED D3908-5	JPH	10.04.06
A	NEW ISSUE	JPH	10.03.04
REV.	DESCRIPTION	BY	DATE
DESIGN	JPH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JPH		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D3908	SHEET 1 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	X-TUBE LUG ASSY (AFT)	NTS
DATE	10.04.06	COPYRIGHT © 2010 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED BY THE SUPPLIER TO THE CUSTOMER UNDER A NON-DISCLOSURE AGREEMENT. IT IS NOT TO BE USED FOR ANY PURPOSE OR TOPIC OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

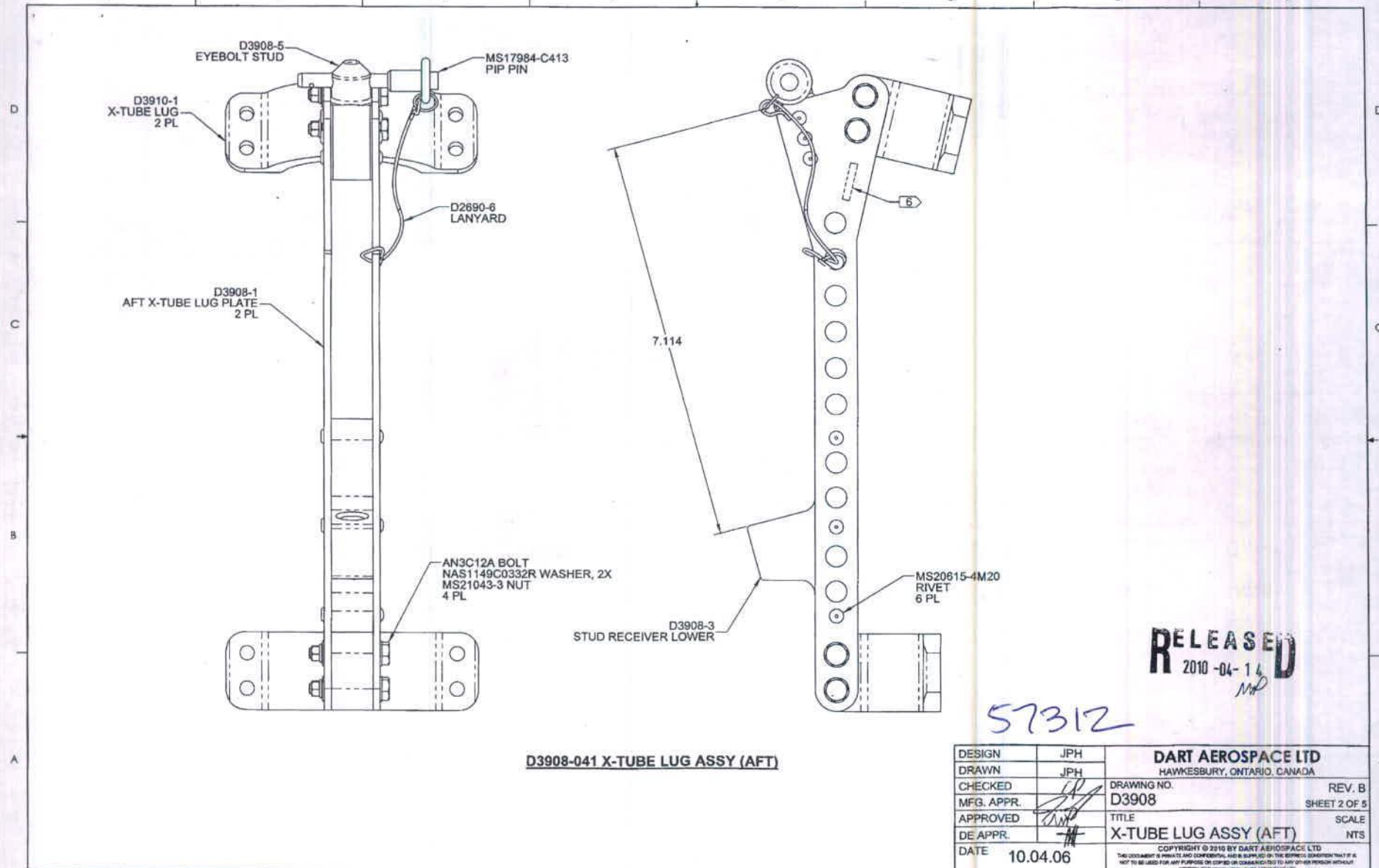
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1



D3908-041 X-TUBE LUG ASSY (AFT)

RELEASED
2010-04-14
MD

57312

DESIGN	JPH	DART AEROSPACE LTD	
DRAWN	JPH	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3908	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		X-TUBE LUG ASSY (AFT)	NTS
DATE	10.04.06	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

8 7 6 5 4 3 2 1

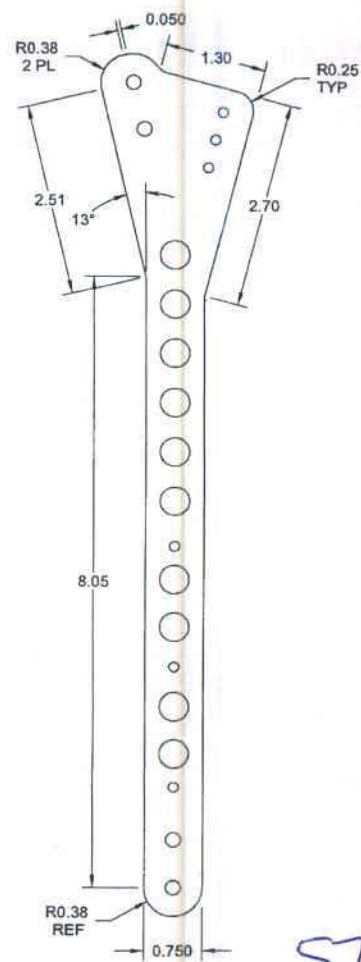
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



RELEASED
2010-04-14

57312

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL 0.125" SHEET ANNEALED 2B FINISH,
PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240
PER DART SPEC M304S11GA OR M303S11GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.32 lbs

DESIGN	JPH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3908 TITLE X-TUBE LUG ASSY (AFT) COPYRIGHT © 2010 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRINTED TO SCALE. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. NO DIMENSIONS SHALL BE MET BY USE OF ANY PURPOSE OR BE USED FOR CONSTRUCTION OF ANY OTHER PERSON WITHOUT WRITTEN PERMISSION OF DART AEROSPACE LTD.</small>	REV. B
DRAWN	JPH		SHEET 3 OF 5
CHECKED	<i>[Signature]</i>		SCALE
MFG. APPR.	<i>[Signature]</i>		NTS
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	10.04.06		

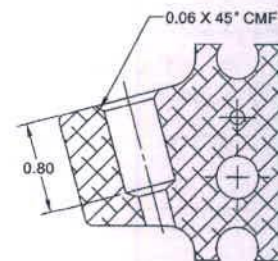
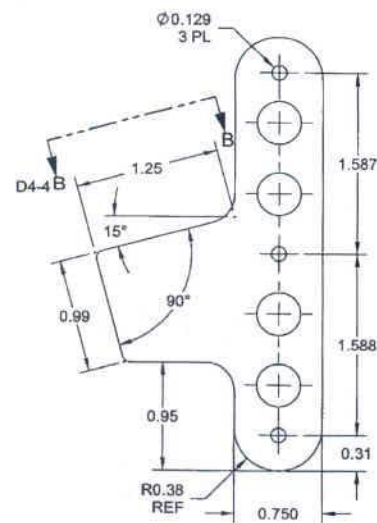
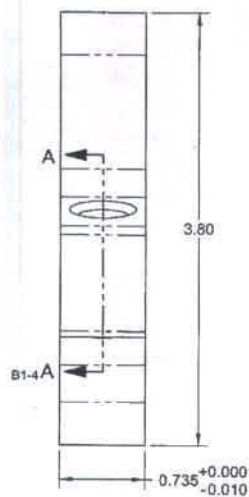
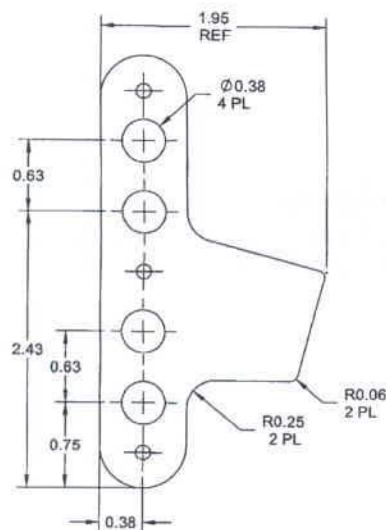
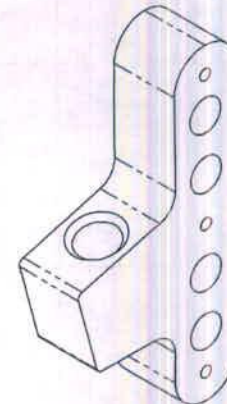
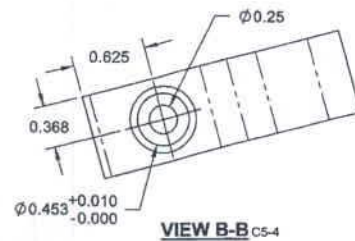
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



SECTION A-A B6-4




RELEASED
2010-04-14
MP

57312

D3908-3 STUD RECEIVER LOWER

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR, PER ASTM A276
PER DART SPEC M303B OR M304B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.69 lbs

DESIGN	JPH	DART AEROSPACE LTD	
DRAWN	JPH	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JPH	DRAWING NO.	REV. B
MFG. APPR.		D3908	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		X-TUBE LUG ASSY (AFT)	NTS
DATE	10.04.06	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE SUPPLIER CONDITION THAT IT IS NOT TO BE RELEASED FOR ANY PURPOSE OR COMED IN CONNECTION TO ANY OTHER PERSON OR ENTITY WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

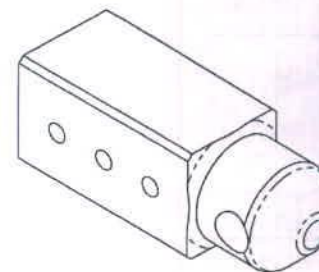
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



NOTES:
 1) MATERIAL: 303/304/316 STAINLESS STEEL ROUND BAR, PER ASTM A276 OR ASTM A582
 PER DART SPEC M303R OR M304R
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: NONE
 7) WEIGHT: 0.26 lbs

RELEASED
2010-04-14

57312

DESIGN	JPH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3908 TITLE X-TUBE LUG ASSY (AFT) COPYRIGHT © 2010 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS LOANED TO YOU BY THE COMPANY'S PERMISSION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR FOR ANY COMMUNICATIONS TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF THE COMPANY AND/OR ITS AFFILIATES.</small>	REV. B
DRAWN	JPH		SHEET 5 OF 5
CHECKED	<i>[Signature]</i>		SCALE
MFG. APPR.	<i>[Signature]</i>		NTS
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	10.04.06		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries